

*U. S. F. C.
Records,*

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1078 to 1121

Copy

A.

Exhibit 10786

1078

Astrophyton Agassizii, Abbott.
Myonium Caninum, rare.
Strongylocentrotus Drotach. (1)
Asclepias vulgaris
Oenodiscus crispatus
Leptasterias Canpla.
Rosalia Hyalii
Cyprina Islandica
Fusus Ecccumbentatus

All bearings

Magnific.

Buccinum undatum
Eupagurus
Pandalus
Opheopholis aculeata
Mytilus,

Solaster endeca, 1 large
Diplo Stephensoni

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1078.

Date,

Aug. 2, 1882

Locality,

off Cape Cod

Bearings,

Naboth's Beacons

N. 1/4 N. Dist. 10 miles

Time of day,

7.30 A.M. ; of tide,

State of sky,

b.c.

Temperature of air,

72. ; dry. serv. Therm.

"

surface of water,

63° N. 3. 47996

"

at depth of

5

fathoms,

56° 10' 40"

"

of bottom,

37.

N. 3. 47995.

Depth, in fathoms,

(53) - 55.

Nature of bottom,

green mud. fine sand

Direction of ~~surface~~ current,

Wind W. S. W. force 3.

Force of ~~surface~~ current,

Drift

S. by W. 1/2 m.

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk.

To what service attached,

U. S. F. C.

Name and rank of commanding officer,

Lieut J. L.

Tanner. U. S. N.

Name and position of observer,

J. B. Bliss

Midn. U. S. N.

1079.

REMARKS.

Hydrobia ulva Agassizii Abbt
Liphs decemcostatus 5.
Cyprina Islandica
Macoma sabulosa
Terebratulina
Saxicava arctica
Glycymeris siliqua
Anomia aduleata
Astarte lens 1 valve
Urticina callosa

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1079*
Date, *Aug. 2, 82*
Locality, *off Cape Cod*
Bearings, *Harvet Beacon*
N. W. by W. 1/2 W. 8 1/4 m
Time of day, *8.40* *1/4* of tide,
State of sky, *b. c.*
Temperature of air, *69*
" surface of water, *63.5*
" at depth of *5* fathoms, *56.5*
" of bottom, *37*
Depth, in fathoms, *59-61 1/2*
Nature of bottom, *fine sand*
Direction of surface current,
Drift Force of surface current, *E. S. E. 1 mile*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

Astrophytum Agassizii, very abdu.
Sipho decemcostatus.
Hyas, *Eupagurus*.
Asterias vulgaris, very large.
Pecten Islandicus.
Lacinaea Norvegica
 " *arctica*
Cyprina Islandica
Glycymeris
Cardium Islandicum.
Sipho Stimpsoni
Macoma sabulosa
Buccinum undatum
Apurkaiis occidentalis
Anomia aculeata
Hippasteria phryganea
Lolaster endeca.
Urticina Callosa
Polocera Tridact.
Ctenodiscus crispatus.
Chalina

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1080.*

Date, *Aug. 2. 1882*

Locality, *off Cape Cod*

Bearings, *at anchor 13 cacon*

N. by N. 1/2 N. 6 1/2 m

Time of day, *9.40* of tide.

State of sky, *b. c.*

Temperature of air, *69.*

" surface of water, *61.5*

" at depth of *5* fathoms, *56.*

" of bottom, *37.*

Depth, in fathoms, *53-55.*

Nature of bottom, *fine sand*

Direction of surface current,

Force of ~~surface~~ *drift* *N. by N. 1 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1081.

REMARKS.

Cardium Islandicum
Glycymeris piligua
Lipho Islandicum
Spisula ovalis
Modiolaria discors.
Pecten Islandicus
Saccicava arctica
Buccinum undatum.
Macoma sabulosa
Lipho decemcostatum.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1081.*
Date, *Aug. 2. 1882*
Locality, *off Cape Cod*
Bearings, *Nantuxet Beacon*
N. by S., 5 1/2 miles
Time of day, *10.50 ; of tide, m.*
State of sky, *b. c.*
Temperature of air, *69.*
" surface of water, *59.*
" at depth of *10 fathoms,* *40.*
" of bottom, *39.*
Depth, in fathoms, *32 to 33 1/2*
Nature of bottom, *Coarse sand & pebbles*
Direction of surface current,
from N. by N. 1 m
Force of surface current, *N. by N. 1 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1082.

REMARKS.

Glycymeris scilicet
Lipisula ovalis
Modiola modiolus

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1082*
Date, *Aug. 2. 1882*
Locality, *Off Cape Cod*
Bearings, *Cape Cod Light N. W.
3/4 N., 1 1/2 miles*
Time of day, *11.45* *At* *off* tide,
State of sky, *b. c.*
Temperature of air, *70°*
" surface of water, *59*
" at depth of fathoms,
" of bottom, *40.*
Depth, in fathoms, *27 - 28.*
Nature of bottom, *Coarse gravel*
Direction of surface current,
Force of surface current, *N. N. by E. 1 mile,*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1083,

REMARKS.

Cypripedium Islandicum
Asplenium occidentale
Gymnocarpium dipterocarpum
Saxifraga hypnoides
Pellaea Islandica
Lepidoptera caesia?
Eupatorium
Helleborus viridis

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, 12.45; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of 10 fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1084,

REMARKS.

Pentacta pro *Dora*. 104y large.
Polacca *T. medice*.
Pandalus *leptoceros*?
etc.
Belemn *Islandicus*.
Spizula *ovata*
Glycimeris *deliqua*
Cypripa *Islandica*
Lipho *Stimpsoni*
Belemn *lenticulatus*
Eupagurus
Palanus *porcatus*?
Anomia *aculeata*
Dolaster *endeca*.
Asterias *vulgaris*.
Hippasteria *phryganea*
Septasterias *compta*

TEMPERATURE RECORD.

Instrument used,

Stanol

Current number of observation,

1084

Date,

Aug. 2. 1882

Locality,

Off Cape Cod

Bearings,

Cape Cod Light

3 N. N. W. 3/8 N., 8 miles

Time of day,

2.20 P.M.

State of sky,

b. c.

Temperature of air,

78.

"

surface of water,

62.5

"

at depth of

10

fathoms,

43.5

"

of bottom,

38.

Depth, in fathoms,

36-37

Nature of bottom,

Coarse sand

Direction of surface current,

Force of surface current,

N. E. 1/2 E.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Atrophylton Agassizii, very abdr.
Pandalus.
Strongylocentrotus Drobach.
Aleponium carneum
Eupagurus
Asterias vulgaris
Leptasterias Compta.
Oribrella sanguinolenta
Hippasteria phrygiana
Colascea endeca
Cyprina Islandica
Cardium Islandicum
Taraxacum arctica
Buccinum undatum
Septa Stimpsoni
Glycymeris piliqua
Psidium uniuersale
Astarte lens,
Spisula ovalis,
Spisula occidentalis,
Psidium Islandicum

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1085*
Date, *Aug. 3, 1882*
Locality, *off Cape Cod*
Bearings, *Race Point Light.*
S. 33° E. 2 miles,
Time of day, *6.15 a.m.*
State of sky, *b, c,*
Temperature of air, *67,*
" surface of water, *64,*
" at depth of *5* fathoms, *61, 10 fms 43,*
" of bottom, *39.*
Depth, in fathoms, *33-34 1/2*
Nature of bottom, *fine sand, green mud*
Direction of surface current,
~~*drift*~~ *S. by E. 1 mile*
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1086.

REMARKS.

Astrophyton Agassizii } *Carinense*
Asclepias vulgaris } *Maritima*
Pandanus leptoceros.
Ophiopholis aculeata
Asclepias Compta
Solanum elaeagnifolium
Cribrella sanguinolenta
Alcyonium Carneum.
Pentacta pendula, 1 large.
Lipho decemcostatus
Modiola modiola
Cardium Islandicum
Spisula ovalis
Cyprina Islandica
Psella Islandicum
Margarita obscura
Daucocarpa arctica
Pennatulella Noachina
Velutina halimoides

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1086*,
Date, *Aug. 3, 1882*
Locality, *off Cape Cod*
Bearings, *Race Pt. Light*
S. 20° W., 2 3/4 miles
Time of day, *7. am.*; of tide,
State of sky, *b. c.*,
Temperature of air, *74*,
" surface of water, *64*,
" at depth of *10* fathoms, *44*,
" of bottom, *39 1/2*
Depth, in fathoms, *33-34*,
Nature of bottom, *fine sand*.
Direction of surface current,
~~Force of surface current,~~ *10 kts S. 3/4 mile*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1087.

REMARKS.

Hippasteria phrygiana
Agas.
Pandalus
Boleophthalmus
" *multicornis*
Hydroids.
Bryozoa.
Oribrella sanguinolenta
Rossia
Sipho decemcostatus
Cardium Islandicum
Spisula ovalis.
Gyprina Islandica
Psella tenuicostatus
Depressa costea.
Paraceras arctica

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1087.

Date,

Aug. 3, 1882.

Locality,

off Cape Cod.

Bearings,

Cape Cod Light -

S. E. 1/4, 7 miles.

Time of day,

8.30 a.m.

State of sky,

b. c.

Temperature of air,

84.

"

surface of water,

62.5

"

at depth of 5 fathoms,

46, 10 fms. 41.

"

of bottom,

39.

Depth, in fathoms,

42 - 44.

Nature of bottom,

grey sand.

Direction of surface current,

Force of surface current,

1/2 m

1/2 m

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Applanos occidentale
Sipho decemcostatus.
Terebratulina septen.
Buccinum undatum
Cardium Islandicum
Recher "
 " *lenuicostatus*
Astarte lens.
Cyprina Islandica
Dacrydium ~~arctica~~ ^{Norvegica}
Anomia aculeata
Lunatia
Natica Clausa
Macoma sabulosa
Modiolaria discors.
 3 *Cephalopods.*
Urticina nodosa
Polocera Fredrica.
 " *multicornis.*
Pandanus borealis
Hippasteria
Volaster, Porania,
Cribrella sanguinolenta
Sponges. *Ophiopholis aculeata*
Hippolyte. *Hydroids.* *Byzonia.*

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1088*
Date, *Aug 6, 1881*
Locality, *off Cape Cod*
Bearings, *Cape Cod light*
S. 11. 3/4 W. 9 1/2 miles
Time of day, *9.50* of tide,
State of sky, *b. c.*
Temperature of air, *82.5*
" surface of water, *62*
" at depth of *5* fathoms, *59.5*
" of bottom, *38.*
Depth, in fathoms, *86-90*
Nature of bottom, *Coarse sand*
Direction of surface current,
10 mph
Force of surface current, *N. by W. 1 1/2 miles*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1089*
Date, *Aug. 3, 1882*
Locality, *off Cape Cod*
Bearings, *Cape Cod Light*
S. 77. 3/4 W. 14 miles
Time of day, *11.10*; of tide, *am*
State of sky, *b. c.*
Temperature of air, *78.*
" surface of water, *63.*
" at depth of fathoms,
" of bottom, *38.5*
Depth, in fathoms, *106-110.*
Nature of bottom, *grey mud*
Direction of surface current,
15 mi ft
Force of surface current, *dr. W. by W. 3/4 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

Water haul

1090.

REMARKS.

Ap porhais occidentalis
Laccaria Norvegica
Salix Lns.

Gordia Thraciformis
Pecten Islandia

Mya truncata

Sipho pygmaea

Stentaleum striolatum

" *occidentalis*

Gordia capatella

Nasus arcticus

Cardium pinnulatum

Leda tenuisulcata

Nasus sp.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1090

Date,

Aug. 3, 1882

Locality,

Off Cape Cod.

Bearings,

Cape Cod light

S. W. $3\frac{1}{4}$ N. 13 $\frac{1}{4}$ miles

Time of day, 11, 50 ; of tide, ebb

State of sky,

b. c.

Temperature of air,

81, 5

"

surface of water,

62

"

at depth of

5

fathoms,

56,

10 fms

52,

"

of bottom,

38, 5

Depth, in fathoms,

106 = 110,

Nature of bottom,

gray mud

Direction of surface current,

W. by N.

Force of surface current,

1.5 miles

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1091.

REMARKS.

Archaster Americanus, very abt.
Pandanus.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1091*
Date, *Aug. 11, 1882*
Locality, *Off Martha's Vineyard*
Bearings, *Lat. 40° 33' N.*
Long. 69° 44' W.
Time of day, *5.30*; of tide, *ebb*
State of sky, *b. c.*
Temperature of air, *77.*
" surface of water, *75.*
" at depth of *10* fathoms, *62.*
" of bottom, *46.*
Depth, in fathoms, *62 = 65 fms.*
Nature of bottom, *gray sand & broken shells*
Direction of surface current, *drift*
~~Force of surface current,~~ *dr. W. by W. 1/2 mile*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1092.

REMARKS.

Archæolites Floræ.
Pennatulita aculeata
Anledon.
Eupagurus.
Randallus.
Warm lutes.
Schizaster fragilis

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1092*
Date, *Aug. 11 1885*
Locality, *off. Little Neck, N. Y.*
Bearings, *Lat. 39° 09' N.*
Long. 69° 42' W.
Time of day, *6.54* *at tide*
State of sky, *b. c.*
Temperature of air, *79*
" surface of water, *75*
" at depth of _____ fathoms,
" of bottom, *41.*
Depth, in fathoms, *194 = 202.*
Nature of bottom, *gray sand*
Direction of surface current,
north
Force of surface current, *at N. W. 3/4 W.*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1093.*
Date, *Aug. 11, 1882*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 39° 56' 00" N.*
Long. 69° 45' - W
Time of day, *8:35 a.m.*
State of sky, *b. c.*
Temperature of air, *82*
" surface of water, *75.*
" at depth of *1* fathoms,
" of bottom, *40.*
Depth, in fathoms, *336 - 349*
Nature of bottom, *hard blue mud*
Direction of surface current,
Force of surface current, N. N. W., 1 mile
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Repeating Transit*
 Current number of observation, *1094.*
 Date, *Aug. 11, 1882.*
 Locality, *3 1/2 miles from New York*
 Bearings, *Lat. 39° 57' N*
Long. 69° 47' W
 Time of day, *10.10*; of tide, *ebb*
 State of sky, *b. c.*
 Temperature of air, *84.*
 " surface of water, *76.*
 " at depth of fathoms,
 " of bottom, *40.*
 Depth, in fathoms, *801.*
 Nature of bottom, *fine sand*
 Direction of surface current,
~~Force of surface current,~~ *1/2 mi. N. W. by N. 1 mile*
 Direction of bottom current.
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl.*
Current number of observation, *1095.*
Date, *Aug. 11. 1882.*
Locality, *off Martha's Vineyard.*
Bearings, *Lat. 39° 55' 28" N.*
Long. 69° 47' 00" W.
Time of day, *11.55 AM*; of tide, *low*
State of sky, *b. c.*
Temperature of air, *82.*
" surface of water, *76.*
" at depth of fathoms,
" of bottom, *40.*
Depth, in fathoms, *321.*
Nature of bottom, *soft green mud*
Direction of surface current,
~~Force of surface current,~~ *10 m. N. N. W. 1/2 W. 3/4 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl.

Current number of observation,

1096.

Date,

Aug. 11, 1888.

Locality,

off Martha's Vineyard.

Bearings,

Lat. $39^{\circ} 53' N.$

Long. $69^{\circ} 47' W.$

Time of day,

1.39 P.M., of tide,

State of sky,

b.c.

Temperature of air,

78.

"

surface of water,

75.5

"

at depth of

fathoms,

"

of bottom,

40.

Depth, in fathoms,

317.

Nature of bottom,

green mud.

Direction of surface current,

Force of surface current, 11.18.11. 1/2 mile

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1097.*
Date, *Aug. 11. 1881.*
Locality, *Off Martha's Vineyard.*
Bearings, *Lat 39° 54' N.*
Long. 69° 44' W
Time of day, *3.10 P.*, of tide, *—*
State of sky, *b.c.*
Temperature of air, *76.*
“ surface of water, *75.5*
“ at depth of _____ fathoms,
“ of bottom, *45.*
Depth, in fathoms, *158.*
Nature of bottom, *fine sand*
Direction of surface current,
Force of surface current, ~~1 1/2 mi. N. 1/2 W.~~ 1 1/2 mi. N. 1/2 W.
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1098.*
Date, *Aug. 11, 1882.*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 39° 53' N.*
Long. 69° 43.7' W.
Time of day, *4.35 P.M.*, of tide,
State of sky, *b. c.*
Temperature of air, *78.*
" surface of water, *75.*
" at depth of fathoms,
" of bottom, *43.5*
Depth, in fathoms, *156.*
Nature of bottom, *fine sand*
Direction of surface current,
~~Force of surface current,~~ *Drift, N. by E. 3/4 mile*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1099*
Date, *Aug. 18th 1882.*
Locality, *Vineyard Id.*
Bearings, *Stobeca Rk Light*
N. 8. W. 1/4 W. 15.78 miles.
Time of day, *11.06; am*
State of sky, *b. c.*
Temperature of air, *76.*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *71.5*
Depth, in fathoms, *6*
Nature of bottom, *Sand. gravel.*
Direction of surface current,
Drift:
Force of surface current, *N. E. 6/8 N. 1/2 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1100.*
Date, *Aug. 18, 1882.*
Locality, *Vineyard Id*
Bearings, *about 1/2 N. 1/2 E. 1/4 N. 1/4 miles*
Time of day, *11.47 A.M.*; of tide,
State of sky, *b. c.*
Temperature of air, *77.*
" surface of water, *72.*
" at depth of fathoms,
" of bottom, *71.5*
Depth, in fathoms, *4 3/4.*
Nature of bottom, *sand, gravel, shells*
Direction of surface current,
~~Force of surface current.~~ *N. E. by N. 1/2 N.*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1101*,
Date, *Aug. 18. 1882*
Locality, *Vineyard Id*
Bearings, *about 4 mi. N. by S.*
1 1/2 miles
Time of day, *12.15 P.M.*
State of sky, *b.c*
Temperature of air, *78.*
" surface of water, *72.*
" at depth of fathoms,
" of bottom, *71.*
Depth, in fathoms, *5.*
Nature of bottom, *shells.*
Direction of surface current,
Force of surface current, *drift S. E. 1 mi.*
Direction of bottom current.
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1102*
Date, *Aug. 18, 1882*
Locality, *Vineyard Id*
Bearings, *East Chop Light*
N. $3\frac{1}{4}$ W. 2 1/2 miles
Time of day, *1, 10 PM*, or tide,
State of sky, *b-c*
Temperature of air, *73.*
“ surface of water, *70*
“ at depth of fathoms,
“ of bottom, *69.*
Depth, in fathoms, *5,*
Nature of bottom, *Coarse sand*
Direction of surface current,
Drift.
Force of surface current, *E by S. $\frac{1}{2}$ m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1103.*
Date, *Aug. 18. 1882*
Locality, *Vineyard Id.*
Bearings, *East Chop. Light.*
N. W. by W. 2 3/4 m
Time of day, *1, 42 P.m.*
State of sky, *O.C*
Temperature of air, *70.*
" surface of water, *70.*
" at depth of fathoms,
" of bottom, *69.*
Depth, in fathoms, *5.*
Nature of bottom, *Coarse sand*
Direction of surface current,
~~Force of surface current,~~ *Drift E. by S. 1/4 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1104*

Date, *Aug. 18. 1882*

Locality, *Vineyard Id.*

Bearings, *East 1/2 N. 1/2 E.*
N. 1/2 E. 1/2 N. 1/2 E. 4 miles

Time of day, *2.12 P.M.*

State of sky, *b.c.*

Temperature of air, *79.*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *69.*

Depth, in fathoms, *8 1/2*

Nature of bottom, *shells*

Direction of surface current,

Force of surface current, *1/2 mile*
drift N. by E. 1/2 E. 1/4 E.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1105*
Date, *Aug. 18. 1882*
Locality, *Vineyard Id.*
Bearings, *Cape Roca Light*
S. by W. 4 miles
Time of day, *3 PM*, of tide,
State of sky, *b. c.*
Temperature of air, *80.*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *7 f.*
Depth, in fathoms, *10.*
Nature of bottom, *Coarse sand*
Direction of surface current,
Force of surface current, *Drift N. E. x E. 1/2 E. 2 miles*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

10200

72

10207

72

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1106*

Date, *Aug 18 1882*

Locality, *Wineyard Sound*

Bearings, *Safe Page S't. House*

X 32 1/2 N 5 1/2 E

Time of day, *9.35* ; of tide, *beginning of flood*

State of sky, *bc*

Temperature of air, *80*

" surface of water, *79 1/2*

" at depth of fathoms,

" of bottom, *72*

Depth, in fathoms, *5*

Nature of bottom, *sand & shells*

Direction of surface current, *N. E. Force 3*

~~Force of surface current,~~ *Drift N. E. & N 1/4 mile.*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1107

REMARKS.

Specific Gravity

Surface	1.0244	67
8 fms	49	67
15 fms	48	68

Trawl over 6 R down 6.25
 hauling in 6.46 up 6.54
 220 fms. out
 1st haul haul

TEMPERATURE RECORD.

Instrument used, *Trawl (came up empty)*
 Current number of observation, *1107*
 Date, *Aug. 22 1882*
 Locality, *Off North's Island*
 Bearings, *Lat 40° - 02' N*
Long. 70° - 35' W
 Time of day, *6.50 A.M.* of tide.
 State of sky, *bc*
 Temperature of air, *69 1/2*
 " surface of water, *71*
 " at depth of *5* fathoms, *71 1/2 10 fms 66*
 " of bottom, *48*
 Depth, in fathoms, *116*
 Nature of bottom, *grey mud*
 Direction of surface current, *W. 54° E, Force 2*
Drift N. W 1'
 Force of surface current.
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1108

REMARKS.

Stiffle 200.152

1.025 67

5/ma 42 68

10/ 60

Travel on 6.58 down 7.55

leaving in 7.57 up 7.50

307 fare out.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1108*

Date, *Aug. 22 1882*

Locality, *off the Chesapeake*

Bearings, *Lat. 40° - 02' N*
Long. 70° - 37' 30" W

Time of day, *6.55* ; of tide,

State of sky, *bc*

Temperature of air, *69 1/2*

" surface of water, *71*

" at depth of fathoms,

" of bottom, *418*

Depth, in fathoms, *1001*

Nature of bottom, *green mud, a fine sand*

Direction of ~~surface~~ *Wind* *N. by N. Force 2*

Drift
 Force of ~~surface~~ *Drift* *N 12 3/4*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1109

REMARKS.

Sample 2.1.1.

Surface	1.0248	66
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5 fms	49	65
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10 fms	44	68
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Frame over	8.02	down	8.10
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leaving in	8.40	up	8.50
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250 fms out

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1109*
Date, *Aug. 22. 1882*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 40°-15' N*
Long 70°-30' W
Time of day, *17.55*; of tide,
State of sky, *bc*
Temperature of air, *70 1/2*
“ surface of water, *71*
“ at depth of fathoms,
“ of bottom, *219*
Depth, in fathoms, *89*
Nature of bottom, *gray sand*
Direction of surface current, *Drift* *North force 2*
~~Name of surface current,~~ *N. N. W. '1'*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1110

REMARKS.

Spec. Grav.

Surface	1.0235	72
5 fms	85	72
10 "	87	71
Travel over 9.25 down 9.95		
Leaving in	10.05	up 10.18
900 fms out		

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1110*
Date, *Aug. 22 1882*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 41° - 02' N*
Long. 71° - 35' W
Time of day, *7.16* ; of tide,
State of sky, *bc*
Temperature of air, *75*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *47*
Depth, in fathoms, *110*
Nature of bottom, *green mud & fine sand*
Direction of ~~surface~~ *wind* current, *N force 2*
~~Force of surface current,~~ *Drift N x W 1/2 W 1'*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1111

REMARKS.

Spec. Grav.

Surface 1.0239 71

5 fms 40 70

10 fms 40 72

Trawl over 10.50 down 10.57

heaving in 11.30 up 11.40

377 fms out.

TEMPERATURE RECORD.

Instrument used, *Deep Sea Thermometer*
 Current number of observation, *1111*
 Date, *Aug. 22 1882*
 Locality, *Off Martha's Vineyard*
 Bearings, *Lat 41° 01' 33" N*
Long 70° - 33" W
 Time of day, *10.43* ; of tide,
 State of sky, *bc*
 Temperature of air, *76*
 " surface of water, *72 10.13 " 46462*
 " at depth of *3* fathoms, *71*
 " of bottom, *47*
 Depth, in fathoms, *224*
 Nature of bottom, *fine sand*
 Direction of ~~surface~~ *wind* current, *N.E. force 2*
~~Force of surface current,~~ *Drift* *N. N. E. 1'*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1112

REMARKS.

Spec. Grav.

Surface	1.0220	69
5 fms	41	70
10 fms	40	69

Trawl over 12.55 down 1.05
 hauling in 1.30 up 1.45
 1.30 fms. out

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*
 Current number of observation, *1112*
 Date, *Aug 22 1882*
 Locality, *off Martha's Vineyard*
 Bearings, *Latitude 39° - 36' N*
Long. 76° - 35' W
 Time of day, *12.43* ; of tide,
 State of sky, *b.c.*
 Temperature of air, *72*
 " surface of water, *72*
 " at depth of *5* fathoms, *72* *16 fms 65*
 " of bottom, *43*
 Depth, in fathoms, *245*
 Nature of bottom, *green mud & sand*
 Direction of surface current, *Wind NW x N 1'*
 Force of surface current, *Drift N. W. x N 1'*
 Direction of bottom current, *Temperature at 20 fms 49*
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1118

REMARKS.

Spec. grav.

Surface	1.0240	68
5 fms	40	70
10 "	41	70
Trawl over 1.54 down 2.03		
hauled in 2.25 up 2.40		
375 fms. out		

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*
 Current number of observation, *1113*
 Date, *Aug. 22 1882*
 Locality, *off Martha's Vineyard*
 Bearings, *Lat. 39° - 57' N*
Long. 75° - 37' W
 Time of day, *1.45* ; of tide,
 State of sky, *bc*
 Temperature of air, *75°*
 " surface of water, *72*
 " at depth of *5* fathoms, *71 1/2 13 fms 65 1/2*
 " of bottom, *43*
 Depth, in fathoms, *192*
 Nature of bottom, *green mud*
 Direction of ~~surface current~~, *Wind N.E. force 2*
~~Force of surface current~~, *Drift North 1'*
 Direction of ~~bottom current~~, *Temperature at 20 fms 49*
 " " *30 " 46*
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1174

REMARKS.

Tram over 2.48 down 2.58-
rowing in 3.16 up 3.28
3.00 free out

TEMPERATURE RECORD.

Instrument used, *Deep Sea Thermometer*

Current number of observation, *1114*

Date, *Aug. 22 1882*

Locality, *Off Martha's Vineyard*

Bearings, *Latitude 39°-38' N*
Long. 70°-38' W

Time of day, *2.40* ; of tide,

State of sky, *bc*

Temperature of air, *74*

" surface of water, *72*

" at depth of *5* fathoms, *71 1/2* *16 fms to 5-*

" of bottom, *43*

Depth, in fathoms, *171*

Nature of bottom, *green mud*

Direction of ~~surface current~~, *Wind N.E. force 2*

Force of ~~surface current~~, *1.5 mi*

Direction of ~~bottom current~~, *Temperature at 5 fms 72*

Force of bottom current, *Temperature " 50 1 mi 43*
21/2 x

Name of vessel.

To what service attached.

Name and rank of commanding officer.

Name and position of observer.

5 fathoms Thermometer
X 673 H 417-22

1125

REMARKS.

Ledge over 3.35 down 3.44
heaving in 4.11 up 4.20
275 fms out
No fish.

TEMPERATURE RECORD.

Instrument used, *Trawl Dredge*
 Current number of observation, *1113*
 Date, *Aug. 22 1882*
 Locality, *Off N. W. of Battery and*
 Bearings, *Lat. 30° - 55' N.*
Long. 78° - 41' W
 Time of day, *5.28 P.M.* of tide,
 State of sky, *bc*
 Temperature of air, *75°*
 " surface of water, *72 1/2*
 " at depth of *5* fathoms, *72* *13 fms* *70*
 " of bottom, *45°*
 Depth, in fathoms, *146*
 Nature of bottom, *green mud & sand*
 Direction of surface current, *Wind*
~~Force of surface current,~~ *Drift* *N.E. force 2'*
N x N 3/4
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

11/16

REMARKS.

Trawl over 4.26 down 4.33
hauled in 4.53. up 5.01
3.52 fine. out

At 5.03 got sounding in
148 fms.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1118*

Date, *Aug. 22 1882*

Locality, *off Mon. Han. Island*

Bearings, *Lat. 39° 59' N*

Long. 76° 29' W

Time of day, *4.20* ; of tide,

State of sky, *b.c*

Temperature of air, *77*

" surface of water, *72* :

" at depth of *5* fathoms, *72* *15 fms 68*

" of bottom, *416*

Depth, in fathoms, *144*

Nature of bottom, *hard sand & mud*

Direction of ~~surface~~ *Wind* *S.E. force 2*

~~Force of surface current,~~ *Drift* *NW & W 1'*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1117 REMARKS.

Travel over 5.37 down 5.41
 leaving in 6.08 up 6.12
 240 fms out

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1117*
Date, *Aug. 22 1882*
Locality, *off. Martha's Vineyard*
Bearings, *Lat. 40° - 50' N*
Long. 70° - 45' W
Time of day, *4.30* ; of tide.
State of sky, *bc*
Temperature of air, *78*
" surface of water, *72*
" at depth of *5* fathoms, *72* *10 fms 62*
" of bottom, *48*
Depth, in fathoms, *89*
Nature of bottom, *fine sand*
Direction of surface current, *Wtd N Force 8*
Drift NE 1'
Force of surface current, *NE 1'*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1118

REMARKS.

Trawl over 6.25 down 6.30
heaving in 6.35 up 6.40
240 fms. out

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1118

Date,

Aug 22 1882

Locality,

off Martha's Vineyard

Bearings,

Lat. 40° 13' N

Long. 70° - 43' W

Time of day,

6 20 P.M. of tide,

State of sky,

b c

Temperature of air,

74

"

surface of water,

72

"

at depth of

fathoms,

"

of bottom,

49

Depth, in fathoms,

76

Nature of bottom,

fine sand

Direction of ~~surface current~~

Wind

N force 2

~~Force of surface current,~~

Drift

N. N. W 1/4"

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1112
REMARKS.

Trawl over 6.37 down 6.41
heaving in 7.22 up 7.22
215 fms. out.

At 5.22 got sounding in 56 fms

Large *Neptunia decemcostata*.

Archaster Americanus.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1119*

Date, *Aug. 26 1882*

Locality, *off Nantucket*

Bearings, *Lat. 40° 58' N
Long. 68° - 45' W*

Time of day, *6.32 A.M.*

State of sky, *b c*

Temperature of air, *68*

" surface of water, *65*

" at depth of *5* fathoms, *65*

" of bottom, *48*

Depth, in fathoms, *97*

Nature of bottom, *sand & broken shells*

Direction of surface current, *Wind N.E. 1/2 E. 1/2 S*

Force of surface current, *Drift N.E. 1/2 N 3/4*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Travell over 7.58 down 8.03
 leaving in 8.30 up 8.45

Lot of *Astrophyton Samarekii*
 not before taken by us.

Bolium Baicidii, frag.

Asplenium decemcostatum

Sipho pubescens

Buceanum undatum

Sipho pubescens

Addisoria paradoxa

Doris complanata

Hyalinocia aillifera

Asplenium undatum

Brickopsis lyngbya

Bolocera Tubbia

Porania spinulosa

Archaster Agassizii

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1120*
Date, *Aug. 26 1882*
Locality, *off Nantucket*
Bearings, *Lat 40° - 05' N*
Long. 68° - 45' W
Time of day, *7 41 A.M.* of tide,
State of sky, *bc*
Temperature of air, *69*
" surface of water, *65*
" at depth of *5* fathoms, *65*, at *10* *56*
" of bottom, *43 1/2*
Depth, in fathoms, *194*
Nature of bottom, *fine sand & stones*
Direction of ~~surface current~~, *Wind NNE. force 9*
Drift
Force of ~~surface current~~, *N.W. 1 1/2*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1121

REMARKS.

Trawl over 9.18 down 9.28
 heaving in 9.48 up 10.05
 556 fms. out.

Large lot *Opheodonta*
multispina
Bolocera Tridactyla Lot.
Hyacinthia aculeata
Dolium Bairdii frag.
Pecten vitreus
Utilicina callosa
Paramuricea borealis
Anisodonta dentatum.
Porania grandis. 1 very
 large. Taken home alive
Solenaster Eadellii. Large
Lophaster fucifer
 (very rare) This and
 last not taken in
 this region before

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1121

Date,

Aug 26 1882

Locality,

Off Nantucket

Bearings,

Lat. 40° - 04' N

Long. 68° - 49' W

Time of day,

9.55 AM of tide,

State of sky,

bc

Temperature of air,

65

"

surface of water,

65

"

at depth of

3

fathoms,

64

10 fms 86

"

of bottom,

41 1/2

Depth, in fathoms,

294

Nature of bottom,

fine sand & fossil stones

Direction of ~~surface current~~,

Wind

NNE

force 4

~~Force of surface current,~~

Drift

N-NW

1'

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.